

VALMET POWERFLOAT PLUS™

Technology Description

Valmet's PowerFloat Plus is a proprietary retrofit replacement for dryer bars in an air floatation dryer. Air floatation dryers are used to dry coating added to the surface of a paper sheet. They are used where non-contact drying is required because the coating would stick to a conventional dryer drum.

PowerFloat Plus dryer bars can be retrofitted to existing systems regardless of the manufacturer. PowerFloat Plus nozzle design delivers more heat and provide better support to the coated sheet over a wider area compared to foil-type and float-type nozzles. The result is greater heat transfer efficiency, better sheet support, more even drying, and reduced maintenance.

PowerFloat Plus can be installed without changing the dryer layout. Rebuilding an air dryer with these nozzles can increase evaporation capacity by 25% compared to float-type nozzles and over 50% compared to foil-type nozzles. In single-sided air dryer applications, replacing impingement nozzles can increase heat transfer efficiency up to 20%.

Benefits

- 1. Greater heat transfer efficiency reduces energy consumption and increases drying capacity.
- 2. Better sheet support results in faster speeds, less marking, and fewer breaks.
- 3. More even drying delivers improved sheet quality.
- 4. Reduced maintenance due to less coating buildup.
- 5. Offers a simple retrofit process as no change is required to the coater layout, air system, or dryer controls.

Customer Type

Paper Mills.

Applications

Air floatation dryers.

Market Sectors

Industrial.

Potential Energy Savings

A 20-50% reduction in paper coating air dryer energy consumption for each installation of PowerFloat dryer bars is guaranteed by the manufacturer. Energy savings vary by installation.

Potential Payback Range

2-5 years pre-incentive.

Incentives Available

Download and complete the Custom Project Incentive Guide [PDF] or Find an Energy Advisor to get started.

